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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,353	10/29/2003	Masaru Sakuma	AMANO A372	6725

27667 7590 08/01/2006

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EXAMINER	
JIMENEZ, MARC QUEMUEL	

ART UNIT	PAPER NUMBER
3726	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,353	SAKUMA ET AL.	
	Examiner	Art Unit	
	Marc Jimenez	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *1-6 and 19-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/30/06, 3/4/05, 10/29/03*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Species B, Claims 7-18 in the reply filed on 6-26-06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 7 and 15-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Sakuma et al. (EP1106278).

Sakuma et al. teach a circular shaped metal structure **18** having a wall thickness in the range of 0.03 mm to 0.09 mm both inclusive (See table 1), the circular-shaped metal structure **18** being comprised of a plurality of metals different from one another (paragraph [0039] and [0108], for example, alloys are comprised of a plurality of metals different from one another). The Vickers hardness Hv is equal to or greater than 380 (paragraph [0105]) or could be in the

range of 100 to 250 (see claim 5 of Sakuma et al.). For the features recited claim 15 of the instant invention, see claim 3 of Sakuma et al.

Regarding the limitations "fabricated by plastic working", "integrally rolled", "spinning work" and the limitations of claim 15, note that the patentability of product does not depend on its method of production. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) (citing *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969)). If a product in a product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product is made by a different process. Id. citing *In re Marosi*, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983); *Johnson & Johnson v. W.L. Gore*, 436 F. Supp. 704, 726, 195 USPQ 487, 506 (D. Del. 1977); see also *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of either one of JP 10-010893 or JP 2002-169392.

Sakuma et al. teach the invention cited with the exception of having a silicon and fluorocarbon resin coated on a surface of the circular shaped metal structure.

JP 10-010893 teaches a silicon and fluorocarbon resin **13** coated on a surface of the circular shaped metal structure.

JP 2002-169392 teaches a silicon and fluorocarbon resin coated on a surface of the circular shaped metal structure (see search report labeled AMANO A372, submitted by applicant filed 1-30-06).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Sakuma et al. with a silicon and fluorocarbon resin coated on a surface of the circular shaped metal structure, in light of the teachings of either one of JP10-010893 or JP 2002-169392, in order to providing a surface that can be capable of fixing distinct images and in order to prevent the metal from being oxidized or rusted.

Regarding claims 13-14, at the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used a copper coating because applicant has not disclosed that a copper coating provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either the silicon and fluorocarbon resin taught by either one of JP 10-010893 or JP 2002-169392 and as claimed in claims 11-12 of the instant invention or the claimed copper coating because either type of coating perform the same function of preventing the metal cylinder from being oxidized or rusted equally well. Note that on page 15, lines 26-27 applicant states that a copper layer would provide the same advantages of those obtained by the silicon and fluorocarbon resin layer. In addition, official notice is taken that it was well known to a person of ordinary skill in the art, at the time

of the invention, to have provided a copper coating, in order to provide a suitable surface that helps prevent the metal structure from oxidation or rust.

6. **Claims 13 and 14** are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of either one of Goto et al. (JP410140387) or Ragland (US4357618).

Sakuma et al. teaches the invention cited above with the exception of having a copper layer.

Goto et al. teach applying a copper layer **11** on a drum **9**.

Ragland teaches a copper layer **43** on a drum **41**.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Sakuma et al. with a copper coating, in light of the teachings of either one of Goto et al. or Ragland, in order to provide a suitable surface that helps prevents oxidation or rust and provides conductivity.

7. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. alone or over Sakuma et al. in view of Andersen (US1974441).

Sakuma et al. teach in paragraph [0039] that the plastic-workable metal material may be selected including both stainless steel and copper. The use of stainless steel and copper laminates are well known to a person of ordinary skill in the art, at the time of the invention, for the purpose of providing conductivity while preventing oxidation and rust. Therefore, it would have been obvious to one of ordinary skill in the art, to have provided a stainless steel and copper laminate, in order to provide conductivity while preventing oxidation and rust.

Alternatively, Anderson teaches a belt made of steel that is copper plated (page 4, lines 99-107).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Sakuma et al. with stainless steel and copper, in light of the teachings of Anderson, in order to provide a suitable surface that helps prevents oxidation or rust and provides conductivity.

Regarding the claimed ratios and thicknesses of claims 9-10, note that it would have been an obvious matter of design choice to a person of ordinary skill in the art, at the time of the invention to have used the claimed thickness ratios and thicknesses, depending upon the desired conductivity requirements. Also, official notice is taken that thicknesses in the claimed ranges and ratios are well known to a person of ordinary skill in the art.

8. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al.

Sakuma et al. could be considered to have only one layer of metal rather than one including a stainless steel and copper having the claimed respective thicknesses. For example, Sakuma et al. could use a metal of SUS304 (paragraph [0108]). Similarly, applicant discloses on page 16, line 5 of the specification of the instant application that "The metal sheet 10 in the embodiment is composed of SUS304". Therefore, applicant states that the use of SUS304 is a suitable metal. It is noted that SUS304 has a composition of more than one metal. Since applicant discloses that using SUS304 is a suitable metal, at the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used

stainless steel and copper because applicant has not disclosed that the use of stainless steel and copper provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either the SUS3034 taught by Sakuma et al. or the claimed stainless steel and copper because either type of metal perform the same function of providing the desired combination of hardness and thickness equally well.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7-20-06

MARC JIMENEZ
PRIMARY EXAMINER